



OfficeConnect Cable Modem External Getting Started Guide

<http://www.3com.com/>

Part No. 10042862
Published January 2001

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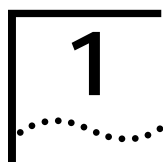
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BEFORE YOU BEGIN

Introduction

You have just purchased a cable modem featuring a pioneering new technology, making Internet access possible at speeds previously only imagined. This external cable modem is one part of a comprehensive communications system that uses the cable television network to deliver high-speed data to your computer. Data is requested and sent over the cable television network at up to 38 megabits per second (Mbps). (Actual speeds will vary depending on your computer hardware, applications, the service offered by your cable service provider, and network traffic. This chapter explains how to prepare your computer system for cable modem installation.

Conventions

This table lists the conventions used in this guide.

Icon	Notice Type	Description
	Information note	Important features or instructions
	Caution	Information to alert you to potential damage to a program, system, or device
	Warning	Information to alert you to potential personal injury

Cable Modem Features

Your new cable modem has these features:

- Cable line bandwidth allows user data rates of up to 38 megabits per second (Mbps) downstream,* faster than 56K analog modems, ISDN, or ADSL.

- You can use the Ethernet connection and USB connection at the same time, allowing you to connect to the Internet using your computer and another Internet device at the same time.
- Two-way design means that the cable modem sends and receives data over the cable line (unlike one-way cable modems, which require an analog modem for upstream data).
- Plug and Play operation ensures easy set up and installation.
- DOCSIS-compliance ensures interoperability with DOCSIS-compliant cable suppliers.
- 3Com's extensive technical support organization provides you with the quick answers you need to connect to the Internet.

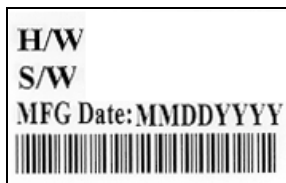


** NOTE: Please note that the following factors affect the speeds you may experience: (1) your computer equipment and configuration, including the speed of your processor, the amount of RAM on your system, and your available hard disk space; (2) applications running simultaneously with the cable modem which use varying amounts of your computer's resources; (3) the capacity of the Internet service you order from your provider; (4) changing network traffic levels depending when you go online.*

Contacting Your Local Cable Provider

To use your cable modem, you first must have your service provider set up an Internet access account for you. Before contacting your cable provider to set up an account, have the following information handy:

- The cable modem's hardware revision, software revision, Ethernet address, and USB address are located on a bar code sticker on the back of the cable modem. Write these numbers in the following blanks.



- Hardware revision: _____
- Software revision: _____
- Manufacturing date: _____
- Ethernet address: _____
- USB address: _____

Now contact your local cable provider and verify this information:

- 1 The cable service to your home supports two-way cable modem access.



If your cable company does not provide two-way service, this cable modem cannot communicate with your cable company's Internet access service. You should immediately consult your cable company and place of purchase to determine which 3Com cable modem to use. You can also visit the following URL for additional information:

<http://www.3com.com/cablemodem>

- 2 Your cable provider has set up your cable Internet access account. This Internet access account enables you to send and receive e-mail, access the World Wide Web, and receive other Internet services. This account must be set up before you can use your cable modem.
- 3 You have a cable line near your PC and it has been prepared for cable modem service. If you do not have a cable line in your home that supports two-way cable modem access, or if your current cable connection is not conveniently located near your computer, your cable provider can install one. If you use your current cable line for cable television access, your cable company can also install an additional line for use with your cable modem.

Preparing Your Workspace

Before installing the cable modem you should prepare your workspace.

Before installing the modem:

- Position your computer and cable modem so that they are located near your cable outlet.
- Allow plenty of room to guide the cables away from the cable modem without crimping them.
- Allow for airflow around the cable modem.
- Do not stack anything on top of the cable modem. (See the instructions on page 25 concerning stacking this cable modem with other 3Com OfficeConnect® products.)
- Verify that the temperature in the room where the cable modem will be operating is between 0 and 40°C (32 and 104°F). Relative humidity must be between 5% and 95%, non-condensing.
- Familiarize yourself with all of the materials supplied with the cable modem. Please read these installation instructions thoroughly before installing the cable modem.



***CAUTION:** Your cable provider provides a cable connection. Do not attempt any rewiring without first contacting your cable provider.*

You Will Need These Items

When you install the cable modem, you will need items from the following lists.

3Com-Supplied Items

Verify that these items were included in the box containing your cable modem:

- Cable modem
- Cable modem power supply
- RJ-45 network cable
- USB cable
- Rubber feet

- Cable *Connections*™ CD-ROM
- This *Getting Started Guide*

Customer- and Service Provider-Supplied Items

Verify that you have these items available:

- FOR ETHERNET INSTALLATION:
 - A PC running Windows® 95 operating system (or later)
 - A Macintosh® computer running System 7.5 (or later)
 - A network interface card (NIC) or active Ethernet port
- FOR USB INSTALLATION:
 - A PC running Windows 98 operating system (or later)
 - An active USB port installed in your computer
- TCP/IP protocol installed (see “Configuring the TCP/IP Protocol” for more information on installing TCP/IP)
- An active two-way cable line
- An adjustable wrench for securing the cable line to the cable modem
- A screwdriver, drawing pins, and screws (for optional wall-mounting). The screw heads should be at least 5mm in diameter so that they fit properly in the slot and fasten the cable modem securely to the wall.

Configuring the TCP/IP Protocol

You must have the TCP/IP protocol installed and configured on your computer so that the cable modem can connect to your broadband Internet service.



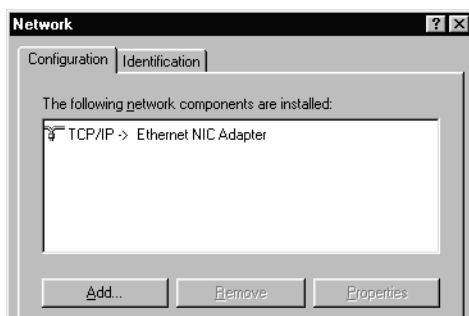
NOTE: If you are using a Macintosh computer, see the instructions on page 7.

Configuring the TCP/IP Protocol on a Windows PC

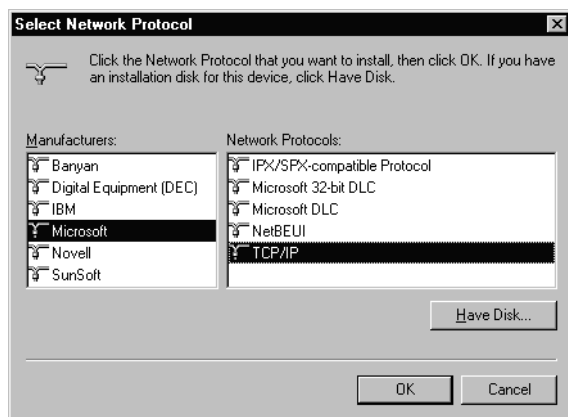
You need to make sure that either an active Ethernet port, Ethernet network interface card (NIC), or an active USB port and the TCP/IP communications protocol are installed on your system before you install your cable modem.

To configure TCP/IP on a Windows PC:

- 1 Right-click the Network Neighborhood icon on your desktop and then click *Properties*.
- 2 A list of installed network components appears. Look for the *TCP/IP* entry. The TCP/IP entry might be followed by an arrow and a description of the NIC hardware device or USB network interface installed in your computer. If an entry similar to this is present, go to step 9.

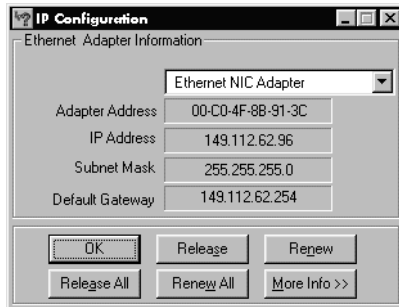


- 3 If a similar TCP/IP entry is not present, click *Add...*
- 4 Click *Protocol*, and then click *Add...*
- 5 Click *Microsoft* in the Manufacturers: list.
- 6 Click *TCP/IP* in the Network Protocols: list. Click *OK*.



- 7 "TCP/IP" appears in the list of available network components. Click *OK*.

- 8 Windows asks you if you would like to restart your computer. Click *No*.
- 9 Right-click the Network Neighborhood icon on your desktop.
- 10 Click *Properties* in the drop-down menu that appears.
- 11 Double-click the *TCP/IP -->* entry in the *Configuration* menu.
- 12 Click the *Advanced* tab and then make sure the box next to *Set this protocol to be the default protocol*. is checked. If it is not checked, click the box to put a check in it. (If this option is grayed out, you do not have TCP/IP installed properly.)
- 13 Click *OK* and then click *OK* again.
- 14 Click Windows *Start* and click *Run*.
- 15 When the Run screen appears, type **winipcfg** in the Text field and click *OK*.
- 16 The IP Configuration screen appears. Click *Release*. A line of zeros appears in the IP Address and Subnet Mask fields.



- 17 Click *Renew*. Numbers replace the zeros. Click *OK* and turn to "Hardware and Software Installation" page 11.



NOTE: The numbers on your screen should be different than those shown in the example above.

Configuring the TCP/IP Protocol on a Macintosh

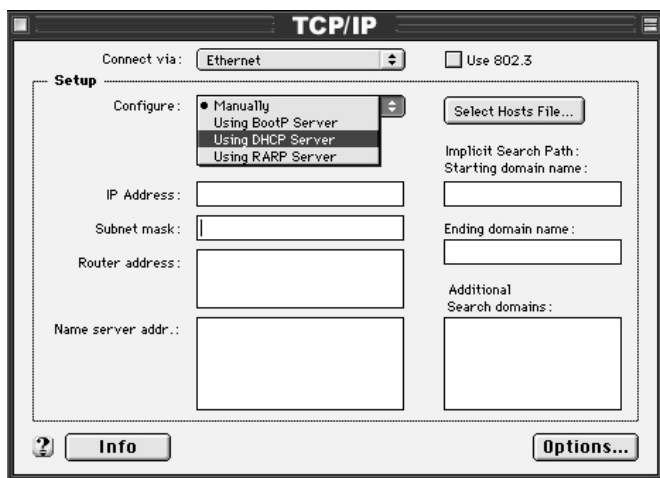
Before you install your cable modem, you must verify that the TCP/IP communications protocol and an Ethernet

device are installed on your system. Many Macintosh computers have Ethernet devices installed at the factory.

To configure TCP/IP on a Macintosh:

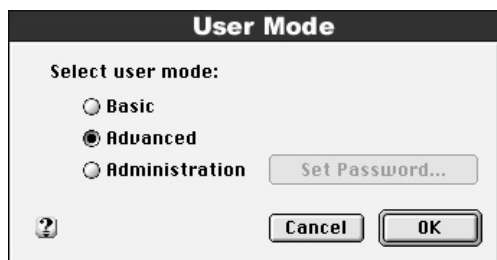
- 1 Click the *Apple*® icon in the Finder™ and select *Control Panels* and then *TCP/IP*.

The TCP/IP screen appears.



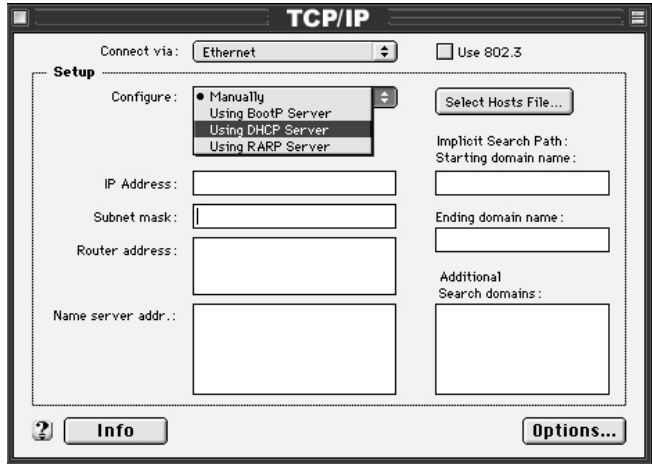
- 2 Click *Edit* in the Finder, and select *User Mode*....

The User Mode screen appears.



- 3 Select *Advanced*, and then click *OK*.

The TCP/IP screen appears.

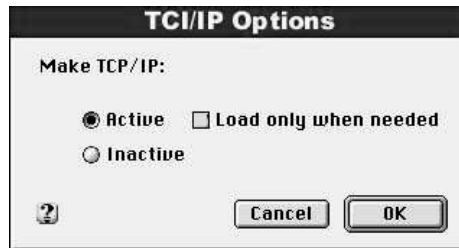


- 4 Click the selector arrows to the right of the *Configure*: drop down menu and select *Using DHCP Server*. Then click *Options...*

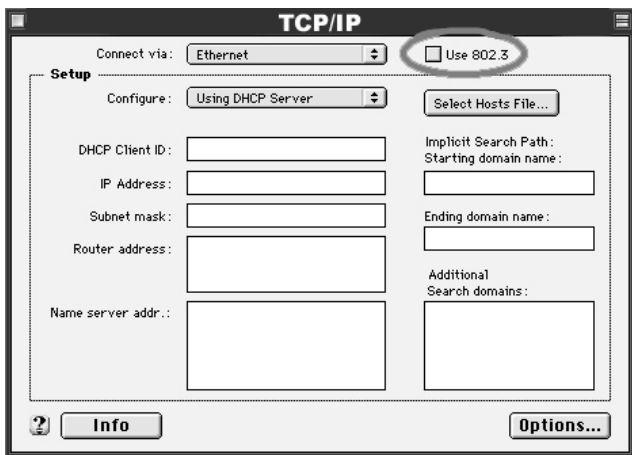
The TCP/IP Options screen appears.



Note: In some cases, the Load only when needed checkbox does not appear. If it is visible, make sure that the box is not checked. If a check mark appears in the box, click the box to remove it.



- 5 Select *Active* and click *OK*.
- 6 Verify that the *Use 802.3* checkbox (circled in the image below) is unchecked. If the box is checked, click the box to remove the check mark. Then click *Info*.



- 7 Ensure there is an address listed in the *Hardware address:* field, and click *OK*. If you have made any changes, you are prompted to save the settings. Click *OK* to save the settings and exit.

2

HARDWARE AND SOFTWARE INSTALLATION



NOTE: Before installing your cable modem, write its serial number in the space provided below. The serial number is located on the cable modem's box. It begins with "HBPk" followed by the last 6 digits of your Ethernet address. (The complete Ethernet address is located on the white sticker on the back of the cable modem.) If you need to call our customer support line, a representative will ask you for this serial number to help identify your cable modem.

Serial number: HBPk_____

Before you begin installing the cable modem hardware, you need to determine how you would like to fit the cable modem into your work environment. There are three installation options:

- Wall-mount installation (page 23)
- Desktop installation (page 24)
- Stacking installation (page 25)

Connecting the Cable Modem to Your Computer

Connect the cable modem to your computer and cable outlet before you install the cable modem software drivers. You can have the Ethernet cable and the USB cable connected to the cable modem and computer at the same time.



TIP: Before you unplug any computer cables, label them or make a sketch of how they are connected. This can be helpful when you plug them back in later.



CAUTION: To avoid risk of electric shock, make sure your computer and all peripheral devices are turned off and unplugged from electrical outlets.



NOTE: Refer to the illustration on page 26 while connecting the cable modem to your computer.

Ethernet Installation

Your cable modem supports Ethernet service. To install the cable modem using an Ethernet connection:

- 1 Connect the cable line to the cable modem's CATV cable connector. Be careful not to bend the wire in the center of the cable line when you connect it to the cable modem.
- 2 After hand-tightening the CATV cable connector, use an adjustable wrench (not included) to firmly tighten it. Be careful not to over-tighten the connector or you may damage either the connector or the cable modem. If you plan to have the cable line connected to a television as well as the cable modem, you will need a cable line splitter (not included).
- 3 Plug one end of the RJ-45 network cable into the cable modem's RJ-45 jack and the cable's other end into the existing network interface card installed in your computer.
- 4 Plug the cable modem's power adapter into a wall outlet or surge protector and into the cable modem's power jack.
- 5 Power on the computer.

USB Installation

Your cable modem supports USB service. To install the cable modem using a USB connection, follow the instructions for your operating system.

Windows 98 Operating System

To use the USB port with Windows 98:

- 1 Make the following connections:
 - a Connect the cable line to the cable modem's CATV cable connector. Be careful not to bend the wire in the center of the cable line when you connect it to the cable modem.
 - b After hand-tightening the CATV cable connector, use an adjustable wrench (not included) to firmly tighten it. Be careful not to over-tighten the connector or you may damage either the connector or the cable modem. If you plan to have the cable line connected to a television

as well as the cable modem, you will need a cable line splitter (not included).

- c Connect one end of the USB cable line to the cable modem's USB port and the other end to the USB port on the computer.
 - d Plug the cable modem's power adapter into a wall outlet or surge protector and into the cable modem's power jack.
- 2 Power on the computer.

Windows detects the cable modem. The Found New Hardware screen appears.
 - 3 When the Add New Hardware Wizard screen appears, insert the Cable *Connections* CD into the computer's CD-ROM drive.
 - 4 Click *Next*.
 - 5 Select *Search for the best driver for your device. (Recommended)* and click *Next*.



- 6 Check the *CD-ROM drive* check box and click *Next* to search for the necessary driver files.



- 7 If Windows finds an updated driver, select *The updated driver (Recommended)* and click *Next*.

- 8 Click *Next*. The computer automatically copies the necessary driver files from the CD.

The computer finishes copying the driver files and prompts you to insert the Windows 98 CD into the CD-ROM drive.

- 9 Insert the Windows 98 CD and click *OK*.



If the Copying Files dialog box appears, make sure that you have inserted the correct CD and that you have pointed it to the correct path. After you point the Add New Hardware Wizard to the correct path, click OK.

The computer automatically copies the necessary system files.



- 10 Click *Finish* after the computer has copied the necessary files.

The System Settings Change dialog box appears.



- 11 Click *Yes* to restart the computer.
- 12 Verify that the cable modem is operating properly. To do this, watch the cable modem *Link Status* and *Power* LEDs; when they are solid green, the cable modem is ready for use.

If you are powering up the cable modem for the first time, allow 15 minutes for this process to finish.

Uninstalling the Cable Modem Software Drivers (Windows 98 Operating System Only)

To uninstall the cable modem:

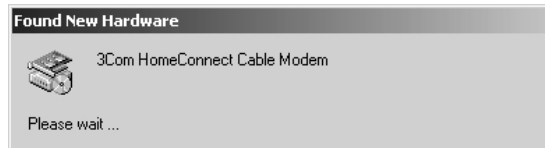
- 1 Close all open applications.
- 2 Click Windows *Start* and select *Settings*.
- 3 Click *Control Panel*.
- 4 Double-click *Add/Remove Programs*.
- 5 Select *3Com OfficeConnect Cable Modem*. Make sure you have selected the software you want to delete. If you accidentally select the wrong software and click *Add/Remove*, Windows deletes the software and you will have to re-install it.
- 6 Click *Add/Remove*. The system removes the 3Com OfficeConnect Cable Modem software.
- 7 The system prompts you to restart the computer. Click *Yes*.
- 8 Click Windows *Start*, then click *Shut Down*.
- 9 Select *Restart the Computer* and click *Yes* to restart the computer.

Windows Me Operating System

To use the USB port with Windows Me:

- 1 Use the illustration on page 27 as a guide to make the following connections:
 - a Connect the cable line to the cable modem's CATV cable connector. Be careful not to bend the wire in the center of the cable line when you connect it to the cable modem. After hand-tightening the CATV cable connector, use the adjustable wrench to firmly tighten it. Be careful not to over-tighten the connector or you may damage either the connector or the cable modem. If you plan to have the cable line connected to a television as well as the cable modem, you will need a cable line splitter (not included).
 - b Connect the USB cable line to the cable modem's USB port and to the USB port on the computer.

- c Plug the cable modem's power adapter into a wall outlet or surge protector and into the cable modem's power jack.
- 2 Power on the computer.



Windows detects the cable modem. The Found New Hardware screen appears.

- 3 When the Add New Hardware Wizard screen appears, insert the Cable *Connections* CD into the computer's CD-ROM drive.



- 4 Select *Automatic search for a better driver (Recommended)* and click *Next*.



- 5 The computer automatically copies the necessary driver files from the CD.
- 6 Click *Finish* after the computer has copied the necessary files.



The System Settings Change dialog box opens.

- 7 Click *Yes* to restart the computer.
- 8 Verify that the cable modem is operating properly. When the modem is operating properly, the cable modem *Link Status* and *Power* LEDs are lighted a solid green.

If you are powering up the cable modem for the first time, allow 15 minutes for this process to finish.

Uninstalling the Cable Modem (Windows Me Operating System Only)

To uninstall the cable modem:

- 1 Close all open applications.
- 2 Click Windows *Start* and select *Settings*.
- 3 Click *Control Panel*.
- 4 Double-click *Add/Remove Programs*.



- 5 Select *3Com HomeConnect Cable Modem External with USB*. Make sure you have selected the software you want to delete. If you accidentally select the wrong software and click *Add/Remove*, Windows deletes the software and you will have to re-install it.
- 6 Click *Add/Remove*. The system removes the 3Com HomeConnect Cable Modem software.
- 7 The system prompts you to restart the computer. Click *Yes*.
- 8 Click Windows *Start*, then click *Shut Down*.

Select *Restart the Computer* and click *Yes* to restart the computer.

Windows 2000 Operating System

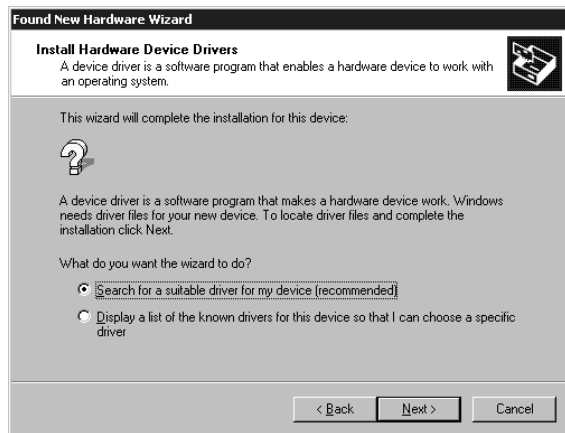
To use the USB port with Windows 2000:

- 1** Make the following connections:
 - a** Connect the cable line to the cable modem's CATV cable connector. Be careful not to bend the wire in the center of the cable line when you connect it to the cable modem.
 - b** After hand-tightening the CATV cable connector, use an adjustable wrench (not included) to firmly tighten it. Be careful not to over-tighten the connector or you might damage either the connector or the cable modem. If you plan to have the cable line connected to a television as well as the cable modem, you will need a cable line splitter (not included).
 - c** Connect one end of the USB cable line to the cable modem's USB port and the other end to the computer's USB port.
 - d** Plug the cable modem's power adapter into a wall outlet or surge protector and into the cable modem's power jack.
- 2** Power on the computer.

The Found New Hardware Wizard screen appears.



- 3 Insert the included Cable *Connections* CD into the CD-ROM drive and Click *Next*.



- 4 Select *Search for a suitable driver for my device (recommended)* and click *Next*.
- 5 Check the *CD-ROM drives* check box and click *Next* to search for the necessary driver files.
- 6 The Found New Hardware Wizard displays the search results. Click *Next* to install the driver files for the cable modem.

- 7 The Found New Hardware Wizard completes the driver installation. Click *Finish* to close the Found New Hardware Wizard.
- 8 Verify that the cable modem is operating properly. To do this, watch the cable modem *Link Status* and *Power* LEDs; when they are solid green, the cable modem is ready for use.

If you are powering up the cable modem for the first time, allow 15 minutes for this process to finish.

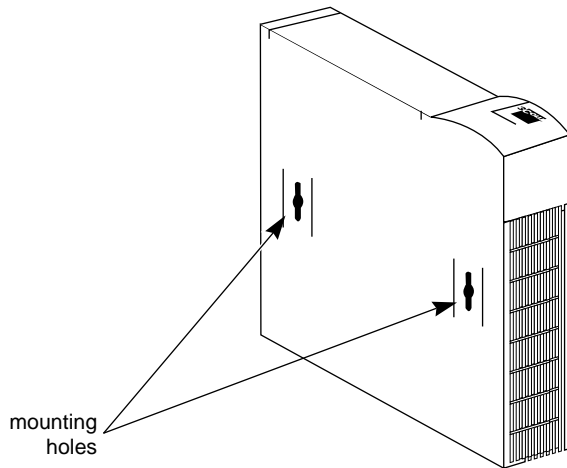
Uninstalling the Cable Modem (Windows 2000 Operating System Only)

To uninstall the cable modem while using Windows 2000:

- 1 Close all open applications.
- 2 Click Windows *Start*.
- 3 Select *Settings*.
- 4 Click *Control Panel*.
- 5 Double-click *Add/Remove Programs*. The Add/Remove Hardware Wizard screen appears.
- 6 Click *Next*.
- 7 Select *Uninstall/Unplug a device* and click *Next*.
- 8 Select *Uninstall a device. Choose this option to permanently uninstall a device and its driver*.
- 9 Click *Next*.
- 10 Select *3Com OfficeConnect Cable Modem* and click *Next*.
- 11 Verify that you have selected *3Com OfficeConnect Cable Modem* then select *Yes, I want to uninstall this device*.
- 12 Click *Next*.
- 13 Click *Finish* when Windows informs you that it has successfully uninstalled the selected device.

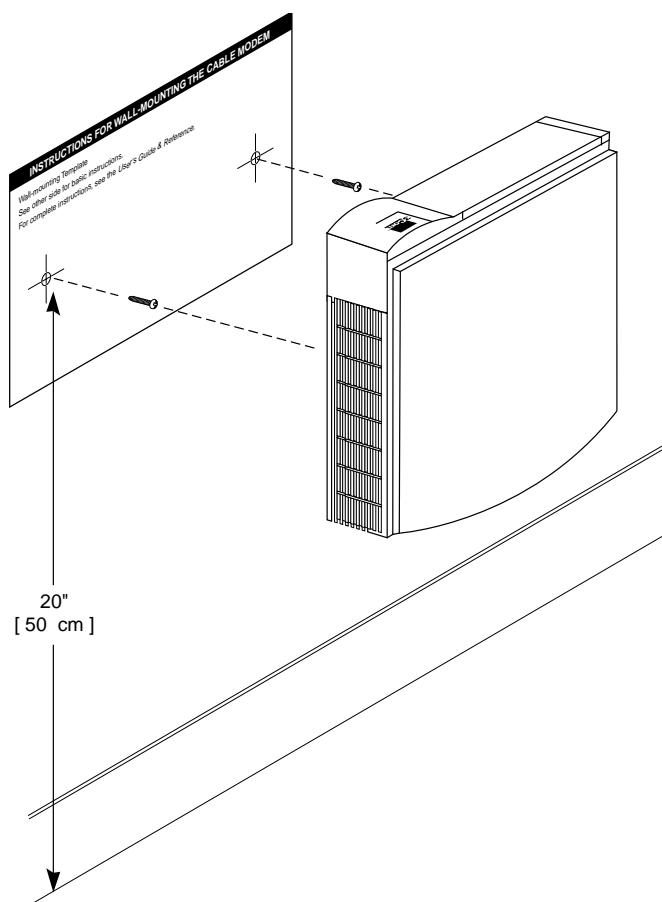
Wall-Mount Installation

The bottom panel of the cable modem has two raised brackets with slots, as shown in the following illustration, which enable you to mount the cable modem to a wall.



These slots fit over the heads of wall-mounting screws to secure the cable modem to the wall. A mounting template for marking the location of the mounting screws is included at the back of this guide.

- 1 Remove the mounting template from the back of this guide.
- 2 Place the mounting template against the wall at the location chosen for the cable modem. The template should be parallel to and at least 50 cm (20 in.) above the floor. Insert drawing pins through the template cross hairs into the wall to mark the locations for the screws.
- 3 Secure the mounting screws into the wall. Do not drive the screws flush to the wall. The screw heads should be at least 6 mm away from the wall so the screws can lock into the slots on the cable modem's case.
- 4 Fit the slots over the screw heads and let the cable modem slide down into position.



- 5 Turn to "Installing the Cable *Connections*™ CD-ROM" on page 25.

Desktop Installation

If you plan to place your cable modem on a flat surface, you can use the four self-adhesive rubber feet supplied with your cable modem to prevent your cable modem from sliding.

To attach the rubber feet:

- 1 Separate the rubber feet.
- 2 Remove the paper backing.
- 3 Attach the rubber feet to the marked areas at each corner of the underside of your cable modem.

OfficeConnect Stacking Installation

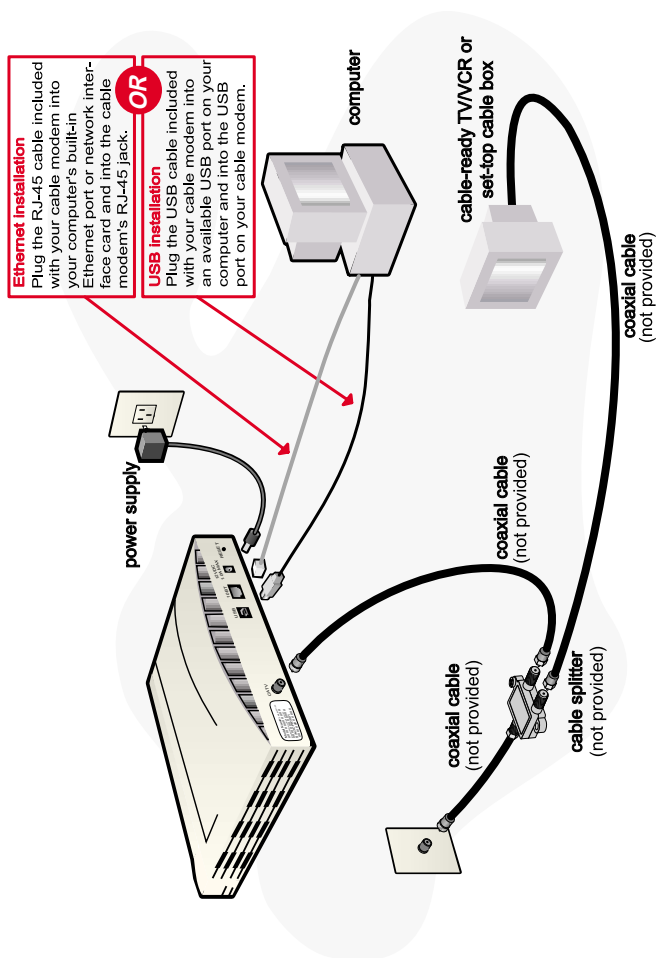
If you already own 3Com OfficeConnect products, you can use the four stacking clips supplied with those products to neatly and securely stack your cable modem with the other OfficeConnect products. Refer to your OfficeConnect documentation for details.

Installing the Cable *Connections*™ CD-ROM

You do not need to install the included Cable *Connections* CD to use your cable modem, but the CD contains valuable free software products and Internet service provider offers included on the CD. To install the Cable *Connections* CD, follow the instructions inside the CD's jacket or on the CD itself.

Connection Illustration

Use this illustration when connecting your cable modem.



3

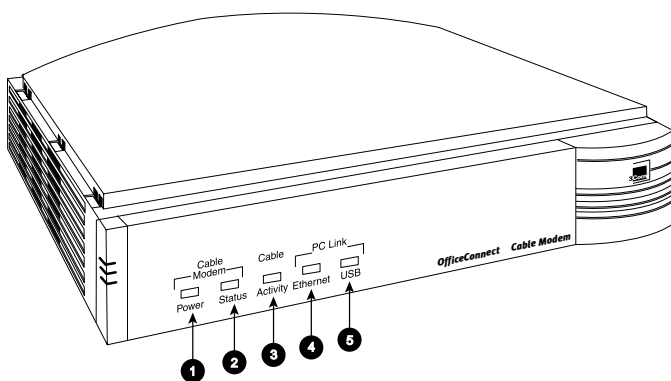
CABLE MODEM OPERATION

Cable Modem Operation Overview

When your cable modem is properly installed and the power supply is connected to AC power, it automatically scans for the active cable modem channel from your cable company's server. When the front panel LEDs indicate the cable modem is connected to the server, simply launch your Internet or e-mail software and you're ready to work online.

Interpreting the LEDs on the Front of Your Cable Modem

Here is an overview of the LED lights on the front panel of your cable modem and what they can tell you about the performance of your cable modem and the condition of your connection.



- 1 Cable Modem Power** — Indicates power is applied to the cable modem. This LED is solid green when the cable modem is on.
- 2 Cable Modem Status** — The color of this LED indicates the cable modem's operations status as:

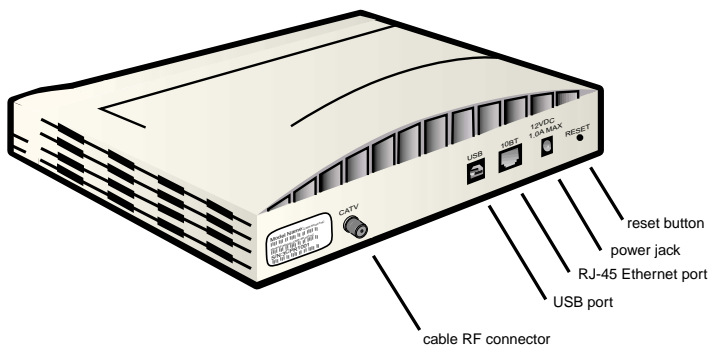
Table 1

LED STATE	DESCRIPTION
BLINKING RED	Cable Modem is searching for a downstream channel
SOLID RED	Downstream channel is locked
SOLID GREEN	Registration is complete and cable modem is operational

- 3 **Cable Activity** — This LED flashes red when data is transmitted to or from your cable company via the RF (cable) port. Flashing red indicates traffic.
- 4 **PC Link Ethernet** — This LED indicates that data is transmitted to or from your PC via the Ethernet port. The LED is solid green when there is connection between the cable modem and an Ethernet port. If the LED is flashing green, there is traffic over the Ethernet port. If this LED is not lighted, then there is no connection between the cable modem and an Ethernet port.
- 5 **PC Link USB** — Indicates that data is being transmitted to or from your PC over the USB port. This LED is solid green when there is a connection between the cable modem and a USB port. If the LED is flashing green, there is traffic over the USB port. If this LED is not lighted, then there is no connection between the cable modem and a USB port.

Connectors and Switches on the Back of Your Cable Modem

Here is an overview of the connectors and switches on the back of your cable modem.



Cable RF Connector — This is where you connect the coaxial cable that leads to your splitter or your cable wall jack.

USB Port — This is where you plug the included USB cable when performing a USB installation. The other end connects to an active USB port on your computer.

RJ-45 Ethernet Port — This is where you plug the included RJ-45 Ethernet cable when performing an Ethernet installation. The other end connects to the RJ-45 jack on your network interface card (NIC) or active Ethernet port.

Power Jack — This is where you plug in the power adapter that came with your cable modem. Remember to use only the power supply that came with your cable modem.

Reset Button — Use this button when you are having trouble connecting to your broadband service provider (BSP). This initiates a full reset of the cable modem and re-initiates the channel scan that occurs every time your cable modem is powered on. Click the button by inserting a ballpoint pen into the hole and pressing until you feel the button click.

4

TROUBLESHOOTING AND SUPPORT RESOURCES

Troubleshooting

I cannot access my e-mail or Internet service.

If you are unable to access your e-mail or use your Internet service try these solutions and then try accessing your e-mail:

- Check all connections.
 - Make sure the cable line is securely connected to the cable jack on the back of the cable modem.
 - Verify that the RJ-45 cable is securely plugged into both the cable modem and your network interface card, or, if you installed your cable modem via an active USB port, that the USB cable is securely fastened to the USB port on your computer and on the cable modem.
 - Make sure your power supply is properly plugged into both the cable modem and an electrical outlet or surge protector.
 - If your cable modem is properly connected, the Cable Modem Power, Cable Modem Status, and PC Link Status Ethernet/USB (depending again on your type of installation) LEDs on the front of the cable modem should all be a solid color.
- Press the reset button on the back of your cable modem. You will need to use a fine-tipped instrument (such as the tip of a ball-point pen) to press the button. Press the button until you feel it click.
- Call your broadband service provider (BSP) to verify that their service is two-way. This cable modem is designed for use only with two-way cable service.
- If you installed the cable modem via a network interface card (NIC), try to determine whether it is malfunctioning. Refer to the NIC's documentation for

troubleshooting information. If you installed the cable modem via an active USB port, refer to your computer's documentation to verify that you have USB enabled on your computer.

- Make sure that TCP/IP is the default protocol in use by your system. See the section titled "Configuring the TCP/IP Protocol" on page 5 for more information.
- If you are using a cable line splitter so that you can connect the cable modem and a television at the same time, try removing the splitter and reconnecting your cables so that your cable modem is connected directly to your cable wall jack.
- If you installed via a network interface card (NIC)
 - Right-click the My Computer icon on your desktop. Click *Properties*.
 - Click the Device Manager tab and look for a yellow exclamation point or red **X** over your NIC in the *Network adapters* field. If either are there, you have an IRQ conflict.
 - Click on your NIC's description to highlight it and then click *Remove*.
 - Double-click *Computer*. A list of used IRQs appears. If all of the IRQs between 0 and 15 are in use, you must remove a device to free an IRQ for your NIC before you can reinstall it (by restarting your computer).

The Cable Status LED never stops blinking.

The signal from your cable company's equipment may be too weak or the cable line may not be properly attached to the cable modem. If the cable line is properly connected to the cable modem, call your cable company to verify whether or not a weak signal may be the problem.

All of the LEDs on the front of my cable modem look right, but I still cannot access the Internet.

If the cable modem's LEDs look right, but you cannot access the Internet, try these solutions:

- If the Cable Modem Power, Cable Modem Status, and PC Link Status LEDs are on but not blinking, your cable

modem is operating properly. Close any open applications, power off your computer, and then power it back on. This will cause your computer to re-establish communications with your cable company's computer.

- Press the reset button on the back of your cable modem. Use a fine-tipped instrument (such as the tip of a ball-point pen) to press the reset button. Press the button until you feel it click.
- You may not have installed TCP/IP properly or the TCP/IP parameters provided by your broadband service provider (BSP) may not be correct for your computer.
- If you are using a cable line splitter so that you can connect the cable modem and a television at the same time, try removing the splitter and reconnecting your cables so that your cable modem is connected directly to your cable wall jack.

**The power on my cable modem goes on and off sporadically.
The Cable Modem Status light never stops blinking.**

You might be using the wrong power supply. Verify that the power supply you are using is the one that came with your cable modem.

Support Resources

3Com provides these support resources if you need help with your cable modem.

World Wide Web

To visit our online support home page, log on to:

<http://support.3com.com>

You can send a message to technical support by clicking *Contact Us* in the "Site Tools" section of this Web site.

90-Day Free Installation Support

3Com offers free installation support for this product for 90 days after purchase. Please call the following toll-free number:

888-877-5040

After the 90-day limit, refer to our regular technical support hotline number, below.

Technical Support Hotline

Technical questions about 3Com cable modems can be answered by technical support representatives. Regular telephone charges apply. The hours service is available are 7:00 AM - 11:00 PM CST Monday through Sunday.

847-262-2550

If You Are Still Having Problems

- Review this manual.
- Call or visit your cable modem dealer. They may be able to assist you.
- If your dealer can't help you, contact 3Com Technical Support. When you call, specify your cable modem's serial number and the software being used.

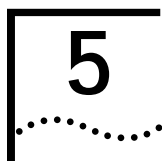
If You Need to Return the Cable Modem to 3Com

Follow these instructions to return your cable modem to 3Com:

- 1 Contact 3Com Technical Support. If the support representative determines that you need to return the cable modem, you will receive a USO (User Service Order) number. You must have a USO number before returning the cable modem to us.
- 2 Ship the unit, postage paid, in a strong box made of corrugated cardboard with plenty of packing material. DO NOT send the cable modem back in the original box. Send ONLY the cable modem (NOT manuals, diskettes, CDs, etc.). Include your USO number, name, and address on the shipping label as well as inside the package. If possible, send the package via a courier capable of tracking the progress of the shipment. Ship to the following address:

3Com
USO # _____
Dock 15

**1800 W. Central Ave.
Mount Prospect, IL 60056**



REGULATORY INFORMATION AND LIMITED WARRANTY

Manufacturer's Declaration of Conformity

3Com
3800 Golf Road
Rolling Meadows, IL 60008
U.S.A.

declares that the product 3Com OfficeConnect Cable
Modem External conforms to the FCC's specifications:

Part 15

Operation is subject to the following two conditions:

- (1) this device may not cause harmful electromagnetic interference, and
- (2) this device must accept any interference received including interference that may cause undesired operations.

FCC Class B Statement

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:

- 1 this device may not cause harmful electromagnetic interference, and
- 2 this device must accept any interference received including interference that may cause undesired operations.

FCC Notice: Radio and Television Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and

used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following information prepared by the Federal Communications Commission helpful: The CIB Interference Handbook and The CIB Telephone Interference Bulletin.

These documents are available on the Internet through the FCC Compliance and Interference Bureau Home Page at <http://www.fcc.gov/cib> (listed under documents). Select CIB Interference Handbook or CIB Telephone Interference Bulletin.

Caution to the User

THE USER IS CAUTIONED THAT ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Performance Specifications

This equipment has a bit-error rate (BER) less than 10⁻⁸ when the signal-to-noise ratio (SNR) is 23.5 dB or greater when operating in 64 QAM mode, and when the SNR is 30.0 dB or greater when operating in 256 QAM mode.

Export Notices

- Unlawful to export from the US or Canada without an approved US Department of Commerce export license.
- The hardware contained in this product contains encryption software which may not be exported or transferred from the US or Canada without an approved US Department of Commerce export license.

License Agreement

You agree that you will not export or re-export the Software or accompanying documentation (or any copies thereof) or any products utilizing the Software or such documentation in violation of any applicable laws or regulations of the United States or the country in which you obtained them.

The software covered by this agreement may contain strong data encryption code that cannot be exported outside of the U.S. or Canada. You agree that you will not export/re-export, either physically or electronically, the encryption software or accompanying documentation (or copies thereof) or any products utilizing the encryption software or such documentation without obtaining written authorization from the U.S. Department of Commerce.

Industry Canada (IC)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled Digital Apparatus, ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: Appareils Numériques, NMB-003 édictée par l'Industrie Canada.

UL Listing/CUL Listing

This Information Technology Equipment (ITE) is UL-Listed and CUL-Listed for use with UL-Listed Personal Computers.

Radio and Television Interference

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. This device has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause interference to radio or television reception, which you can determine by monitoring reception when the cable modem is installed and when it is removed from the computer, try to correct the problem with one or more of the following measures:

- Reorient the receiving antenna (for televisions with antenna reception only) or cable input device.
- Relocate the computer with respect to the receiver.
- Relocate the computer and/or the receiver so that they are on separate branch circuits.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the following booklet, prepared by the Federal Communications Commission, helpful:

How to Identify and Resolve Radio-TV Interference Problems

Stock No. 004-000-0345-4

U.S. Government Printing Office

Washington, DC 20402

In accordance with Part 15 of the FCC rules, the user is cautioned that any changes or modifications to the equipment described in this manual that are not expressly approved by 3Com could void the user's authority to operate the equipment.

VCCI Statement

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

3Com Corporation Limited Warranty

Hardware

3Com warrants to the end user ("Customer") that this hardware product will be free from defects in workmanship and materials, under normal use and service, for the following length of time from the date of purchase from 3Com or its authorized reseller:

5 Years

3Com's sole obligation under this express warranty shall be, at 3Com's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or if neither of the two foregoing options is reasonably available, 3Com may, in its sole discretion, refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of 3Com. Replacement products may be new or reconditioned. 3Com warrants any replaced or repaired product or part for ninety (90) days from shipment, or the remainder of the initial warranty period, whichever is longer.

Software

3Com warrants to Customer that each software program licensed from it will perform in substantial conformance to its program specifications, for a period of ninety (90) days from the date of purchase from 3Com or its authorized reseller. 3Com warrants the media containing software against failure during the warranty period. No updates are provided. 3Com's sole obligation under this express warranty shall be, at 3Com's option and expense, to refund the purchase price paid by Customer for any defective software product, or to replace any defective media with

software which substantially conforms to applicable 3Com published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. 3Com makes no warranty or representation that its software products will meet Customer's requirements or work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third party products listed in the 3Com software product documentation or specifications as being compatible, 3Com will make reasonable efforts to provide compatibility, except where the non-compatibility is caused by a "bug" or defect in the third party's product or from use of the software product not in accordance with 3Com's published specifications or user manual.

THIS 3COM PRODUCT MAY INCLUDE OR BE BUNDLED WITH THIRD PARTY SOFTWARE, THE USE OF WHICH IS GOVERNED BY A SEPARATE END USER LICENSE AGREEMENT. THIS 3COM WARRANTY DOES NOT APPLY TO SUCH THIRD PARTY SOFTWARE. FOR THE APPLICABLE WARRANTY, PLEASE REFER TO THE END USER LICENSE AGREEMENT GOVERNING THE USE OF SUCH SOFTWARE.

Year 2000 Warranty

In addition to the Hardware Warranty stated above, 3Com warrants that each product sold or licensed to Customer on and after January 1, 1998 that is date sensitive will continue performing properly with regard to such date data on and after January 1, 2000, provided that all other products used by Customer in connection or combination with the 3Com product, including hardware, software, and firmware, accurately exchange date data with the 3Com product, with the exception of those products identified at 3Com's Web site,

<http://www.3com.com/products/yr2000.html>

as not meeting this standard. If it appears that any product that is stated to meet this standard does not perform properly with regard to such date data on and after January

1, 2000, and Customer notifies 3Com before the later of April 1, 2000, or ninety (90) days after purchase of the product from 3Com or its authorized reseller, 3Com shall, at its option and expense, provide a software update which would effect the proper performance of such product, repair such product, deliver to Customer an equivalent product to replace such product, or if none of the foregoing is feasible, refund to Customer the purchase price paid for such product.

Any software update or replaced or repaired product will carry a Year 2000 Warranty for ninety (90) days after purchase or until April 1, 2000, whichever is later.

Obtaining Warranty Service

Customer must contact a 3Com Corporate Service Center or an Authorized 3Com Service Center within the applicable warranty period to obtain warranty service authorization. Dated proof of purchase from 3Com or its authorized reseller may be required. Products returned to 3Com's Corporate Service Center must be pre-authorized by 3Com with a User Service Order (USO) number marked on the outside of the package, and sent prepaid and packaged appropriately for safe shipment, and it is recommended that they be insured or sent by a method that provides for tracking of the package. The repaired or replaced item will be shipped to Customer, at 3Com's expense, not later than thirty (30) days after 3Com receives the defective product.

WARRANTIES EXCLUSIVE

IF A 3COM PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, CUSTOMER'S SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT 3COM'S OPTION. TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS

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3COM SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT OR MALFUNCTION IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLIGENCE, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO OPEN, REPAIR OR MODIFY THE PRODUCT, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OTHER HAZARDS, OR ACTS OF GOD.

LIMITATION OF LIABILITY

TO THE FULL EXTENT ALLOWED BY LAW, 3COM ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF 3COM OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT 3COM'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Disclaimer

Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for

certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to you. When the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty. This warranty gives you specific legal rights which may vary depending on local law.

Governing Law

This Limited Warranty shall be governed by the laws of the State of California, U.S.A. excluding its conflicts of laws principles and excluding the United Nations Convention on Contracts for the International Sale of Goods.



MOUNTING TEMPLATE

3Com® OfficeConnect® Cable Modem External Wall-mounting Template

For complete instructions, see the *Getting Started Guide*.



